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(54) INFUSION PUMP ASSEMBLY

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(57)ABSTRACT

A wearable infusion pump assembly includes a reservoir for receiving an infusible fluid, and an external infusion set configured to deliver the infusible fluid to a user. A fluid delivery system is configured to deliver the infusible fluid from the reservoir to the external infusion set. The fluid delivery system includes a volume sensor assembly, and a pump assembly for extracting a quantity of infusible fluid from the reservoir and providing the quantity of infusible fluid to the volume sensor assembly. The volume sensor assembly is configured to determine the volume of at least a portion of the quantity of fluid. The fluid delivery system further includes a first valve assembly configured to selectively isolate the pump assembly from the reservoir, and a second valve assembly configured to selectively isolate the volume sensor assembly from the external infusion set.

